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April 5, 1995

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

BY MESSENGER

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

Re: In the Matter of Advanced Television  
Systems and Their Impact Upon the Existing  
Television Broadcast Service  
MM Docket No. 87-268

Dear Mr. Caton:

The Association for Maximum Service Television ("MSTV"), pursuant to Section 1.206(a)(2) of the Commission's Rules, and on behalf of a coalition of broadcasters (the "Broadcasters Caucus"),<sup>1/</sup> hereby notifies the Commission that a meeting was held among Broadcasters Caucus members, consumer electronics equipment industry representatives, the FCC Advisory Committee on Advanced Television representatives, and FCC personnel on April 4 at the ANA Hotel in Washington D.C. to discuss issues related to the roll-out of advanced television ("ATV").

The non-FCC personnel commented, and responded to questions, on a number of aspects of the transition to ATV, as reflected in the attached agenda. The substance of these

<sup>1/</sup> In addition to MSTV, this coalition consists of the Association of America's Public Television Stations; Association of Independent Television Stations, Inc.; CBS Inc.; Capital Cities/ABC, Inc.; Fox Broadcasting Company and Fox Television Stations; National Association of Broadcasters; National Broadcasting Co.; Public Broadcasting Service; and Tribune Broadcasting Co. These are some of the organizations that filed the Broadcasters' Proposed ATV Allotment/Assignment Approach, MM Docket No. 87-268, January 13, 1995.

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Mr. William F. Caton  
April 5, 1995  
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comments and responses is reflected in the written submissions of the Broadcasters Caucus members in the above-referenced docket and in comments set forth in various public fora by other meeting participants. In addition, the written comments of Molly Pauker (FOX Television Stations) and Joseph Flaherty (CBS, Inc.) and an MSTV White Paper entitled "ATV Channels, Flexibility and The Public Interest" (March 20, 1995) were distributed at the meeting and are enclosed herewith.

Attending the meeting from the FCC were the following: Stephen A. Bailey, Bruce A. Franca, Donald H. Gips, William Hassinger, Diane Law, Blair Levin, Saul T. Shapiro, David R. Siddall, Andrew Sinwell, Richard M. Smith, Alan R. Stillwell, Roy J. Stewart, Brett Tarnutzer, Keith Townsend, and Douglas W. Webbink.

Please direct any questions concerning this matter to the undersigned.

Sincerely,



Ellen P. Goodman

Attorney for  
Association of Maximum  
Service Television, Inc.

Attachments

cc: Stephen A. Bailey  
Donald H. Gips  
Richard M. Smith  
Roy J. Stewart

**BROADCASTERS CAUCUS SPONSORED  
DISCUSSION WITH FCC TASK FORCE ON ATV**

April 4, 1995

**Agenda**

*Introduction from Margita White (MSTV)*

*Background from Michael Sherlock (Broadcasters Caucus)*

**I. Broadcasters are Prepared to Implement Many Uses of ATV**

**A. HDTV Uses**

*Joseph Flaherty, Senior Vice President, Technology  
CBS Inc.*

**B. Multi-Program Digital Uses**

*Molly Pauker, Vice President Corp. & Legal Affairs  
FOX Broadcasting Company*

**C. Non-Broadcast Uses**

*Mark Richer, Vice President/Engineering  
Public Broadcasting Service*

**D. Mix Of Uses**

*Edward Reilly, President  
McGraw Hill Broadcasting*

**II. Transition Scenarios/Relationship to FCC Requirements**

**A. Networks/O&O Stations**

*Samuel Antar, Vice President/Legal Affairs  
CapCities/ABC*

**B. Affiliated Smaller Stations**

*Richard Paxton, President  
WPSD-TV, Paducah, Kentucky*

**C. Independent Stations**

*Leavitt Pope, President/WPIX-TV  
Tribune Broadcasting Company*

**D. Public Broadcasting**

*Mark Richer, Vice President/Engineering  
Public Broadcasting Service*

### **III. Consumer Impact/Equipment Issues**

#### **1. Roll-Out Scenarios and Receiver Design Considerations**

*Peter Bingham, President  
Philips Laboratories*

#### **2. Compatibility/Interoperability**

*Glenn Reitmeier, Director High Definition Imaging & MultiMedia  
David Sarnoff Research Center*

### **IV. Status of System Development/Standards**

#### **1. Testing and Implementation of Grand Alliance System**

*Richard Wiley, Chairman  
FCC Advisory Committee on Advanced Television*

#### **2. Evaluation of COFDM**

*Lynn Claudy, Senior Vice President/Science & Technology  
National Association of Broadcasters*

#### **3. Where We Go From Here**

*Margita White, President / Jonathan Blake, Counsel  
Association of Maximum Service Television*

STATEMENT OF MOLLY PAUKER  
FOX TELEVISION STATIONS  
For Meeting Sponsored by Broadcaster Caucus  
With FCC Task Force on Advanced Television  
APRIL 4, 1995

In 1992, the Third Further Notice in the advanced television docket, the Commission stated that one of its goals is "to ensure that the ATV technical standard is sufficiently flexible to allow it to incorporate future advances in technology, ... including future techniques that might provide for the transmission of more than one ATV program service on a single conversion channel...."

Flexibility in the development of the digital transmission channel is, in our view, absolutely critical. No one can predict where consumer demand and technology will be tomorrow.

It's no secret that our company is eager to take advantage of the packetized transmission capabilities of the Grand Alliance system and broadcast both HDTV at certain times and several video programs simultaneously in a single 6 Mhz digital data stream, at other times, depending upon program content and audience demand, among other factors. Particularly in the early years of digital television, before there is wide-spread public investment in video display devices necessary to appreciate "true" high definition, we believe that multiple program services can drive the consumer market for digital television and provide financial resources necessary for the development of high definition.

Rest assured: this will not be multiple-channel NTSC. Digital transmission alone will, in our view, yield picture quality significantly better than what is available in viewers' homes today, without ghosting and other picture-degrading characteristics of analog broadcasting, and without the distortions of the NTSC color system; it will have the 16 by 9 wide-aspect ratio and CD quality sound of HDTV.

Certain types of programming, sports in particular, and other full motion or live action telecasts, may well lend themselves to "true" high definition presentation. Other types of programs may not require such high resolution. A flexible standard that allows broadcasters to present HDTV at times when their viewers desire it and the market supports it, but is flexible enough to permit them to gauge the proper mix of multiple program service (or ancillary services) and high definition service for their audience will permit broadcasters to tailor their programming appropriately. If the public demonstrates a preference for a particular picture size or level of clarity overall, broadcasters will provide it, or risk rejection and failure in a highly competitive marketplace.

As I've said, we at Fox are eager to expand our range of program services for the public and we believe that other broadcasters share our anticipation. We envision our main program service continuing, of course, in a digital TV world,

along with a free over-the-air news service during times when the entire 6 MHz is not in use for HDTV. We also hope to build on the Fox Children's Network and create a digital children's channel, programming more hours and day parts for children than the economics of today's television marketplace permit. It even may be possible, during daytime hours when lower viewing levels may not support full HDTV programming, to present instructional programming designed for in-classroom children's viewing, using the digital bit-stream. Additional sports and entertainment also may be in the multi-program mix.

In conclusion, several things are clear: television is going digital, and broadcast television also must do so, if it is not to end up as the old gray mare on the information superhighway. On the other hand, we have an obligation not to leave our analog viewers in the dust as we join the digital revolution. For this reason, we cannot go digital without a second transition channel, until our viewers catch up with the new technology. With a digital advanced television standard flexible enough to allow us to use that second channel to provide HDTV at times when our programming and our public warrant it and multiple digital programs or (ancillary services (or both)) at times when the latter is more suitable, broadcasting can become over-the-air digital freeway, meeting and challenging our cable and telco video competition.

**M S T V   W H I T E   P A P E R**

**ATV Channels, Flexibility  
and  
The Public Interest**

Association for Maximum Service Television, Inc.  
1776 Massachusetts Avenue, NW  
Washington, DC 20036

March 30, 1995



March 30, 1995

**IT IS FAIR AND GOOD PUBLIC POLICY  
AND CONSISTENT WITH THE LAW FOR THE FCC TO ASSIGN  
ATV CHANNELS TO THE PUBLIC'S EXISTING BROADCAST  
SERVICE AND TO IMPOSE CONDITIONS AND PROVIDE  
FLEXIBILITY FOR THE USE OF THOSE CHANNELS.**

The history of local television in the United States has been marked by dramatic technological breakthroughs, and the public has benefitted from the flexibility broadcasters have demonstrated in experimenting with and inaugurating new technologies and new services. A sample of these breakthroughs include:

- the shift from black and white to color,
- the use of satellite feeds,
- stereo sound,
- second-language audio,
- closed captioning for the hearing impaired, and
- the explosion of electronic news gathering.

Of course, not all innovations have succeeded, and teletext is but one example of a technology born with much promise that then died with little notice. These technology/service innovations have been undertaken, often at considerable risk, by the private sector -- technologists, the creative community and, critically at the implementation stage, the local broadcaster. Their ultimate success has been determined where it must be: by the public in the marketplace. The government only has played the important facilitating role of setting broad technical and service standards.

The public has been well served by a dynamic and evolving broadcast industry. Ninety-eight percent of American homes enjoy television service, exceeding even the percentage of homes utilizing telephone service. This service

is locally oriented, available without charge, and universally available. All citizens benefit from television service, not just those who have access to and can afford cable or other subscription services. That is why broadcasting is the information highway of the present and, upgraded, can and should be the foundation stone of the superhighway of the future. NTIA Director Larry Irving has stated: "Broadcasters remain the principal source of free, universally available electronic information in the United States, and it is important to ensure full participation by that industry in the NII."

The United States faces an explosion and convergence of new communications technologies and services. As in the past, broadcasters are leading the way, embracing digital television – HDTV and the ancillary services it makes possible. Broadcasters seek to pursue these opportunities within existing spectrum assignments,<sup>1</sup> and only need enabling governmental regulatory action; they do not look for government financial support.

As a result of these technological breakthroughs, local television stations will do more for their public than ever before. Thus, by the end of this decade, a television station may be providing four kinds of services on its ATV channel:

- A main channel of programming, which for an NFL game and much of the prime time schedule provides full HDTV, requiring the use of almost all of the 6 MHz channel.

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<sup>1</sup> An extremely important exception is auxiliary spectrum, which makes possible local news, vigorous competition, emerging technologies, and new services. Threatened with being displaced in the 2 GHz band, faced with auxiliary use growth of 15% per year, and needing spectrum for the shift to digital, broadcasters must have access to replacement spectrum in the 2 GHz band and access to modest amounts of new spectrum in the 4 GHz band.

- Up to six channels of news programming — the general news program and five more specialized in-depth newscasts focusing on financial news, international news, sports, other topics, or the newscasts could focus on different regions within its service area. Three of these additional news program services are advertiser-supported programming freely available to the entire public.
- Specialized news or entertainment services available on a subscription basis to the entire public but received only by those who pay the required fee.
- Medical history information distributed securely among doctors' offices and hospitals during the broadcast day via unused bits in the digital bit stream; this service would be paid for by participants in the information network.

Broadcasters currently have different views on how the new digital capacity should be used. It may be that different stations will employ different mixes of the above options or create new options, or deploy different strategies during different dayparts, or evolve from one mix to another as the creative community explores the various potentials of ATV and the viewing public responds. This diversity of vision is a healthy sign – indeed, it is the opposite of central planning and government dictating the marketplace. This diversity of vision also demonstrates once again local broadcasting's vibrancy and responsiveness.

In view of this diversity and the uncertain nature of the marketplace, broadcasters must be given the flexibility to use their ATV channels for whatever services they believe the public desires (for example, all four uses described above). *This should be on the condition that broadcasters provide,*

*without charge, at least one free advanced television program service per 6 MHz channel that is intended for and available to the general public without charge.* This requirement ensures that broadcasters will continue to be broadcasters in the future, while they also explore other programming and distribution services the public may want. A final issue some want to address is whether broadcasters that use their ATV channels to provide a subscription service should pay fees based on such services.

The assignment of channels to broadcasters for deployment of ATV technology with the above-stated requirement has led a few commenters to suggest that the *Ashbacker* doctrine or public policy requires the Commission to open up the ATV channels to competing applicants or to subject them to auctions. Section I addresses the first of these issues; Section II discusses the policy issues on assignment; and Section III deals with flexibility issues.

#### I.

The FCC's objective in its ATV proceeding has been to "enhance[ ] the current television broadcast system." *Memorandum Opinion and Order*, MM Docket No. 87-268, 7 FCC Rcd 6924 at n.1 (1992). The Commission also has recognized that the current system will be most readily enhanced if broadcasters have flexibility in the use of these new technologies and the mix of services they make possible. *Id.* at ¶¶ 76-77. *See also* Letter of Chairman Reed E. Hundt to Hon. Edward Markey, Chair, House Subcomm. on Telecomm. (Mar. 11, 1994).

The Commission has determined that deployment of ATV will enhance the current television broadcast system, and that such deployment is a logical technological evolution for broadcasters. Granting broadcasters the channels they need to accomplish this deployment, without sacrificing current television viewers, will promote this logical evolution. Indeed, such ATV channel

assignments simply "let's broadcasters be broadcasters," both for those Americans with digital receivers and those with older television sets.

It misses the point to argue that *Ashbacker*, which broadly speaking requires the Commission to treat similar applicants for the same license similarly, imposes a legal barrier to the Commission's grant of new channels to existing broadcasters to transition to digital television and to allow them to use those channels flexibly, subject to some conditions. As the Court of Appeals for the D.C. Circuit has said, *Ashbacker* "merely held that the Commission must use the same set of procedures to process the applications of *all similarly situated persons* who come before it seeking the same license." *Maxcell Telecom Plus, Inc. v. FCC*, 815 F.2d 1551, 1555 (D.C. Cir. 1987). *Ashbacker* does not mean that the Commission lacks authority to establish license eligibility criteria. In fact, the courts have upheld on a number of occasions Commission rules that declare one set of persons eligible for a new spectrum assignment, including current license holders, and disqualify other classes of persons. See *United States v. Storer Broadcasting Co.*, 351 U.S. 192, 202 (1956) (hearing requirement in section 309 does not limit the Commission's power to establish license eligibility criteria); *Hispanic Information & Telecommunications Network, Inc. v. FCC*, 865 F.2d 1289, 1294 (D.C. Cir. 1989) (FCC not required to conduct a comparative hearing between local and non-local applicants for ITFS station where it previously decided under its rulemaking authority to give preference to local applicants).

*Ashbacker* presents no more of a legal obstacle here than it did in the FCC's decision to give an additional 5 MHz to each existing cellular licensee without permitting competing applications to be filed or in the FCC's restriction of license eligibility for a block of cellular radio frequencies to

wireline telephone companies. See *Amendment of Parts 2 and 22 of the Commission's Rules Relating to Cellular Communications Systems*, 86 FCC 2d 469, 483 (1981). Here, the ATV channels would be made available to a particular class of existing licensees, that is current broadcasters, so that these licensees can continue to serve and benefit the public by transitioning to the next generation of television technology.

Thus, *Ashbacker* upholds the FCC's authority under the Communications Act to establish substantive eligibility criteria for applicants and dismiss ineligible applicants without a hearing. And *Ashbacker* does not in any way undercut the Commission's legal authority to determine what type of services can be offered on a licensed station. In its ATV proceeding, the FCC has determined that it is not creating a wholly new service and that, for compelling public interest reasons, it should restrict initial eligibility for ATV channels to existing broadcasters. *Ashbacker* does not reduce the FCC's rulemaking authority to adopt these eligibility restrictions. Nor does it present a bar to the FCC finding, based on its expertise and comments submitted by interested parties, that it would be in the public interest to give broadcasters flexibility in using their channels. The key issue is whether the Commission has a reasoned, public interest basis for the finding that existing broadcasters should be able to enhance the television service they provide and should be able to use ATV channels for additional services.

## II.

Having addressed any potential legal impediments to granting broadcasters the spectrum they need to transition to ATC, one must then review the policy basis for such a grant of spectrum. There are at least three compelling reasons why it is good public policy to limit eligibility at the outset for ATV channels to local broadcasters.

Preventing viewer disenfranchisement. The need to protect the viewing public compels assignment of ATV channels, in the first instance, to existing broadcasters. The viewer who currently receives programming services from local affiliates, independents, Spanish language stations and public stations should not be deprived of those services because of the transition to ATV. If those services can be enhanced by HDTV or stereo sound or ancillary news channels, for example, existing viewers should be permitted to enjoy the fruits of this upgrading. In this way, the grant of spectrum is most clearly analogous to the grant of additional spectrum to cellular license holders – the additional spectrum merely permits an existing licensee to provide a better quality and more robust service.

Implementation of digital television. Full implementation of digital television – with its attendant benefits of HDTV, ancillary services, more competition, and more American jobs – will be dramatically advanced by broadcasters taking the lead. It is over-the-air television viewing that has driven the purchase of some 200 million television sets nationwide, and sixty five percent of cable viewing is of over-the-air stations. If digital television is to catch on, it will do so only if it is accommodated in the over-the-air medium. At a cost of hundreds of millions of high-risk dollars, broadcasters will implement digital television, and in reliance on that fact equipment

manufacturers and programmers will have the incentive to create programs in digital form and manufacture digital equipment. But make no mistake: Broadcasting is the engine that will make digital possible. Without the proper incentives and opportunities, it is likely to fail.

Fairness Basic fairness also requires that ATV channels be assigned to broadcasters in the first instance. It is their technology (NTSC) that will be outmoded even to the point that the FCC eventually will take back their existing NTSC channels. Broadcasters and their public, both of which have invested so much in the existing medium, should be allowed to participate in the new medium. A grant of an additional channel within the existing broadcast spectrum is necessary to "let broadcasters be broadcasters" now and in the future as the technology takes its next leap forward. Of course, others will have the opportunity to apply for ATV channels that are available after broadcasters have been able to upgrade their service. The fact that in larger markets existing broadcasters will likely use all available ATV channels only indicates that the television spectrum authorized for television is already saturated in these markets. Broadcasters, through the Advisory Committee, the Test Center, and otherwise have devoted tens of millions of dollars to developing and evaluating digital technologies. For this equitable consideration as well, broadcasters should receive suitable ATV assignments.

If ATV channels were made available to all comers, the consequence would be speculation, green mail, spectrum use inefficiency, and delays and high costs in the implementation of digital television services.



### III.

The conclusion that the FCC should assign ATV channels to existing broadcasters is consistent with the fact that broadcasters would be allowed to use them flexibly. Five policy reasons support flexible spectrum use:

- First, ancillary services will enhance the public's broadcast service.
- Second, the Commission's precedent in the use of FM subcarriers and DBS frequencies for non-broadcast purposes favors flexibility.
- Third, ancillary services might generate revenues that would help underwrite ATV's huge costs.
- Fourth, ancillary uses will allow broadcasters to compete on a more equal footing with other multi-channel program providers.
- Fifth, ancillary capability will give broadcasters the ability to experiment with new services that could contribute to the NII.

Some argue that the FCC should exact a price for broadcasters' use of their spectrum because spectrum is auctioned for other uses in newly allocated spectrum. But broadcasters do not seek to use frequencies outside their existing spectrum allocation. Broadcasters' access to a second channel will enable them to upgrade from NTSC to new digital technology without disenfranchising their viewers. Since the additional spectrum will serve to facilitate the delivery of a service by current licensees, a new licensing process is not required under Ashbacker, and payments should not be used as a substitute for the competing application process, which is not necessary. Moreover, as a matter of public policy, the assessment of fees could impede the digital transition by eroding broadcasters' ability to provide new services and innovation. As it is now expected that broadcasters will have to hand back their NTSC channels once

that transition substantially has taken place, the time to consider exacting a price for additional spectrum capability is if and when broadcasters wish to retain both channels.

### Conclusion

Amid the stunning changes that have recently altered and expanded the means of communication, the importance of traditional broadcasting is undiminished. Broadcasting remains unique in its ability to reach all Americans, serve them for free, and respond to their tastes and needs community by community. Broadcasters are now prepared to bring these same attributes to a digital world. Despite digital television's obvious attractions, it is not a sure thing and will require sustained, risky investment by those who provide it. Over the past several years, many broadcasters have undertaken the preliminary planning and investment necessary to roll out ATV, thereby paving the way for enhanced television service and competition in the video marketplace. Government actions that impede broadcasters from providing the full range of programming options digital ATV technology allows will jeopardize its viability, penalize the viewing public, and unfairly deny broadcasters the opportunity to upgrade for the future enjoyed by other media. Instead, broadcasters should be assigned ATV channels and permitted to serve the public in a flexible manner while continuing to meet their public interest obligation. This course is consistent with the law and puts the U.S. on a solid path to a digital future that all Americans will enjoy.



**Digital Advanced Television and HDTV**

**in the United States**

**prepared by**

**Dr. J. A. Flaherty FIEE**

**for a meeting of the Broadcast Caucus and the FCC**

**Washington, D.C.**

**April 4, 1995**

## Digital Advanced Television and HDTV in the United States

prepared by Dr. J. A. Flaherty FIEE

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April 4, 1995

The whole television industry and its conversion to digital television awaits the FCC's decision on the U.S. Digital Advanced Television Transmission (ATV) Standard.

Digital HDTV production equipment has long been designed and available. Its large scale production leading to reduced costs awaits the Digital ATV standard. Digital "standard TV" equipment has been available for many years in its 525 line, interlaced, 4:3 form. Wide screen formats await the approval of the digital ATV standard.

Digital transmitter designs are now complete, and up to six will be shown at this year's NAB. Further manufacture and sale await the Digital ATV standard.

Wide screen digital ATV and HDTV receiver designs are well underway by virtually all the consumer receiver companies. Their mass production awaits the Digital ATV Standard.

On the HDTV program front, unlike Europe and Japan, the U.S. commercial TV networks could launch a significant HDTV program schedule within one year. In fact, up to 70% of the prime time schedules on all the commercial television networks are, and always have been, produced in HDTV - namely, 35mm film. For thirty years American producers have made television programs in HDTV, yet not one frame of this quality has ever been delivered to the American home. The delivery of this "cinema" quality awaits the Digital ATV Standard.

And what about the public? Will they care about digital ATV and HDTV? One thing is sure, the consumer marketplace will be quick to indicate its interest, one way or another, but the vast array of new and improved services offered by digital technology and HDTV will no doubt result in widespread demand. This demand will grow steadily with time until the NTSC service is ultimately replaced. The large and ongoing supply of prime time HDTV programs will likely stimulate the audience to move to digital, wide screen, ATV and HDTV.

HDTV broadcasts could begin on a small scale within a few months of the adoption of the Digital ATV Standard and the table of ATV channel allotments and assignments.

What then is to be considered in the adoption of the Digital ATV Standard?

First, the TV channels to be assigned for digital "advanced television" are the last VHF and/or UHF channels available to make a transition to digital television for the United States, and this VHF/UHF spectrum is the only spectrum suitable for terrestrial, over-the-air transmission of television to localized mass audiences.

Second, the Digital ATV standard needs to continue to be compatible with the National Information Infrastructure (NII) as it is in the "Grand Alliance" system.

Third, Digital HDTV is not just pretty pictures for today's small screen TV sets. Rather, it is a wholly new digital platform which will support the larger and vastly improved displays being developed around the World and will bring the "cinema experience" into the home.

Thus, we must not get this Digital ATV standard wrong. If we were to do so, it would take 15 to 20 years before the old NTSC channels would become available to fix any mistake. We need to protect American broadcasting's future by providing the maximum "head room" in the standard to accommodate future developments and improvements. Lacking this ability to accommodate future improvements, terrestrial broadcasting will not remain competitive with cable, DBS, fiber, and home video.

Therefore, it will be of utmost importance to ensure that the ATV standard has wide screen, 16:9, HDTV as its highest quality level. Flexibility to broadcast lower orders of the ATV hierarchy, including "standard resolution" TV, is technically possible in the "Grand Alliance" system through the use of digital technology and the MPEG-2 compression and transport systems. The U.S. ATV standard for the 21st century needs to support full HDTV as specified in the "Grand Alliance" system.

Without a standard that supports HDTV, broadcasters would be locked out of this application when, and not "if", the cable, DBS, fiber, and home video media offer HDTV services to the American home. Such a competitive disadvantage could be disastrous for the Nation's free over-the-air terrestrial broadcasting, and would deprive millions of Americans of this "Cinema-like" viewing experience.

In this regard, it is vital to remember that the HDTV signal requires the entire 6 MHz, 20 Megabit, channel. Thus, the ATV channels cannot be subdivided and assigned to multiple users or services nor can any regulation require the full time assignment of any ATV sub-channel to a special purpose without preventing the transmission of HDTV. The channel can be subdivided by a single broadcaster to provide multiple "standard TV" services in some day parts, but the entire channel must be reassembled and employed intact to broadcast an HDTV program. Thus, any plan to slice up the ATV channels and divide them among many users would permanently destroy the ability of terrestrial broadcasters to ever broadcast HDTV. Such would certainly not be in the public interest.

In short, the entire process awaits the approval of the "Grand Alliance" ATV system with its complete hierarchy of standards from HDTV to multiple program "standard TV". Time is becoming of the essence. As Hippocrates wrote:

"Time is that wherein there is opportunity, but opportunity is that wherein there is little time."